



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 120 TO FACILITY OPERATING LICENSE NO. DPR-25
AND AMENDMENT NO. 116 TO FACILITY OPERATING LICENSE NO. DPR-30
COMMONWEALTH EDISON COMPANY
AND
IOWA-ILLINOIS GAS AND ELECTRIC COMPANY
QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2
DOCKET NOS. 50-254/265

1.0 INTRODUCTION

By letter dated July 11, 1989, as amended by letter dated August 14, 1989, Commonwealth Edison Company (the licensee) proposed changes to the Technical Specifications (TS) for Quad Cities Nuclear Power Station, Units 1 and 2. The proposed changes would modify specifications having cycle-specific parameter limits by replacing these limits with a reference to the Core Operating Limits Report (COLR). The proposed changes would also add the COLR to the Definitions and Administrative Controls Sections of TS. Guidance on the proposed changes was developed by NRC on the basis of a lead-plant proposal submitted on the Oconee plant docket by Duke Power Company. Subsequently, this guidance was provided to all power reactor licensees and applicants by Generic Letter 88-16, dated October 4, 1988.

2.0 EVALUATION

The licensee's proposed changes to the TS are in accordance with the guidance provided by Generic Letter 88-16 and are addressed below.

- (1) The Definition Section of the TS was modified to include a definition of the Core Operating Limits Report. This definition notes that plant operation within these limits is addressed by individual specifications.
- (2) The following specifications were revised to replace the values of cycle-specific parameter limits with a reference to the COLR that provides these limits.
 - a. Specifications 3.2.C (Table 3.2-3) and 3.6.H.3d

The Rod Withdrawal Block Monitor Upscale Instrumentation Setpoint equation for these Specifications is provided in the COLR.

b. Specification 3.3.C.5

The overall average of the 20 percent insertion scram time limit for this Specification is provided in the COLR.

c. Specification 3.5.I

The Average Planar Linear Heat Generation Rate (APLHGR) limit for this Specification is provided in the COLR.

d. Specification 3.5.J

The Linear Heat Generation Rate (LHGR) limit for this Specification is provided in the COLR.

e. Specifications 3.5.K and 3.6.H.3a

The Minimum Critical Power Ratio (MCPR) limits for these Specifications are provided in the COLR.

(f) Specification 3.5.K

The K_f factors that are applied to the operating limit minimum critical power ratio (MCPR) for this Specification are provided in the COLR.

The bases of affected specifications have been modified by the licensee to include appropriate reference to the COLR. Based on our review, we conclude that the changes to these bases are acceptable.

- (3) Specification 6.6.A.4 was added to the reporting requirements of the Administrative Controls Section of the TS. This specification requires that the COLR be submitted, upon issuance, to the NRC Document Control Desk with copies to the Regional Administrator and Resident Inspector. The COLR provides the values of cycle-specific operating limits that are applicable for the current fuel cycle. Furthermore, this specification requires that the values of these limits be established using NRC approved methodology and be consistent with all applicable limits of the safety analysis. The approved methodology is NEDE-24011-P-A, "General Electric Standard Application for Reactor Fuel," (latest approved version). Finally, this specification requires that all changes in cycle-specific parameter limits be documented in the COLR before each reload cycle or remaining part of a reload cycle, and submitted upon issuance to the NRC prior to reactor operation within the new parameter limits.

Based upon a detailed review of the above items, the NRC staff concludes that the licensee provided an acceptable response to Generic Letter 88-16 on removing cycle-specific operating limits from TS. Because plant operation continues to be limited in accordance with the values of cycle-specific limits that are established using an NRC approved methodology, the NRC staff concludes that this change is administrative in nature and there is no impact on plant safety as a consequence. Accordingly, the staff finds that the proposed changes are acceptable.

As part of the implementation of Generic Letter 88-16, the staff also reviewed a sample COLR provided by the licensee. On the basis of this review, the staff concludes that the format and content of the sample COLR are acceptable.

NRC staff reviewed the request by Commonwealth Edison Company to modify the Technical Specifications of the Quad Cities station, Units 1 and 2, to remove the specific values of some cycle-dependent operating limits and place them in a Core Operating Limits Report referenced by TS. NRC staff concludes that the aforementioned Technical Specification modifications are acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

These amendments involve a change to a requirement with respect to the installation or use of a facility component located within the restricted areas as defined in 10 CFR Part 20. The staff has determined that these amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). These amendments also involve changes in recordkeeping, reporting or administrative procedures or requirements. Accordingly, with respect to these items, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR §51.22(c)(10). Pursuant 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

4.0 CONCLUSION

The staff has concluded, based on the considerations discussed previously, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations and, (3) the issuance of this amendment will not be inimical to the common defense and security nor to the health and safety of the public.

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Dated: October 20, 1989